

Harvest Season Wrap-up, Fall Chores and Food Safety

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SPEAKERS

Christa Hartsook, Joe Hannan

- C** Christa Hartsook 00:15
Hello, and welcome to the small farms podcast, a production of the small farms program at Iowa State University Extension and Outreach. Our podcast covers the opportunities and challenges associated with rural life. Today, I'm visiting with Joe Hannon, commercial horticulture specialist for Iowa State University Extension and outreach. And we're talking about some fall chores after the harvest season is complete. Joe, welcome. Thanks for being back.
- J** Joe Hannan 00:43
Hey, Christa, how are you doing today?
- C** Christa Hartsook 00:45
I'm great. How are you?
- J** Joe Hannan 00:47
Having a great fall?
- C** Christa Hartsook 00:48
Awesome. That's great to hear. Joe, let's just jump right into it. You know, the harvest season is over. We need to take some time before winter weather hits and really do some cleaning around our acreage is and our small farms that we have out there.

J Joe Hannan 01:05

Yeah, just talked to our weather folks here yesterday, day before. And it looks like we have nice, decent, slightly warmer than average temperatures coming up through November. So a lot of opportunity to still get outside and do that basic maintenance chores around our farm around our high tunnel and things like that.

C Christa Hartsook 01:26

That's great. Joe, let's talk specific to high tunnels. If we've had a high tunnel in our production system, what do we need to do now to kind of winterize that and get things ready to go for next year,

J Joe Hannan 01:37

because it's the same thing I say every year it's get in there, remove all plant debris, get the irrigation system out, cleaned up, get it all in containers outside of that building. Really what we want to make sure there's nothing left inside the building that can harbor allow our pests to overwinter. And so that means no pet plants, you know, non crop plants, no stirring pots, containers, equipment, etc. In there, making sure all the weeds are out, you know, you want a very clean internal building. Likewise, it's not just the inside of the building, but really take a look at that area that 1520 30 feet around behind tunnel and make sure grass and weeds are mowed down. There's no trash laying around. Again, nothing for pest to overwinter. Okay, high tunnels are just such a perfect environment come next spring, if you've got a couple aphids or a couple mites or a little bit of disease plant material, I guess back in the building, they're going to take off real fast again.

C Christa Hartsook 02:42

Sure, absolutely. Joe what about repairs or replacement? Should we look at that yet this fall or wait till spring?

J Joe Hannan 02:51

Crystal, I'm always a fan of get it done now, especially as you're figuring out what you need to purchase over the winter. So if you've got dents that are broken or not working right, or your roll up or drop down sides are working right? Now's the time to do again, we have a what should be a fairly nice November coming up. I am always on the side of things where if it's on the fritz or it's not quite working. I'm a fan of just throwing it away. So you're not prone to use it again or quote unquote, get by with it for another year. Get that stuff done. Now, that way you can get it repurchase, replaced or get it on the list of things that you need to do this winter.

C Christa Hartsook 03:37

Absolutely. Joe what about plastic what's what are we looking at there for a lifetime of our

plastic use?

J Joe Hannan 03:45

Well, normally we expect three to five years on plastic for being good usable plastic. By the time you get into that five year range, you start getting a lot of cracks, tears holes in the plastic, those are all nice easy places for wind to come through and grab your plastic and rip your top off. So if you've got a lot of a lot of holes in the plastic, it's time to be thinking about replacing it you know replacement costs for a 30 by 90 tunnel now is roughly \$500 give or take a little bit for the actual materials. It is not just whether it's torn or cracked. To look at though, you also want to look at how much light is actually coming through that plastic. When you get into that four or five year old plastic, you might have as much as 25% maybe up to 35% of your light not coming through that plastic and at that point, you really do need to replace it you will see the effects of that low light coming into the tunnel affecting plants. You know your plants will be elongated stretched out and large leaves, things will be slower to ripen.

C Christa Hartsook 04:57

So absolutely.

J Joe Hannan 04:58

I will say a really easy way to look at how much light is coming through that plastic is to get a simple light meter, it's the same thing that would be used, like in the photography industry to look at how much light is coming, coming through, measure inside the tunnel, measure outside the high tunnel, subtract the difference, and you can figure out what percent differences is not coming through. And if you're having to be close to Dallas County, Adel or I'm, housed at I have a meter, I'm happy to loan it out. Let people borrow it. Okay, you know, cost for one of your own is the 25 to \$50 range. So not real expensive?

C Christa Hartsook 05:39

No, probably a worthwhile investment. If you've got the tunnel.

J Joe Hannan 05:43

It is yeah, it's something that you shouldn't be having, especially if you have multiple tunnels to make decisions on when do you actually need to replace that tunnel? Because, you know, if you're in and out of there every day, you don't see or you don't notice that light decline over time.

C Christa Hartsook 05:57

Sure. If we do need to pull that plastic, something you do in the fall?

J Joe Hannan 06:04

Yeah, why leave it on over the winter and risk risk the wind catching it, pulling it off. You know, it also allows for rainfall to come in or snowfall to come in and start leaching salts down through that root zone. So get it off. Now, there's added benefit for that.

C Christa Hartsook 06:22

Sounds good Joe if our plastic is still good, and we are not pulling that this fall yet. What should we be doing about leaching those salts from that soil,

J Joe Hannan 06:32

turn on the irrigation system for a long time. Okay, you want to run 1000s A couple 1000 gallons of water down into that red zone in order to move any salt buildup down below that root zone. And it does take a lot of water to move those salts down 12,14, 18 inches. So turn it on with an overhead sprinkler, let it run all day, move it to a new spot tomorrow, let it run all all day. And then you may need to repeat that a couple times. Again, you really want to saturate it. So that water moves down through the profile. Sure. Fortunately, we are pretty wet right now around the state. So you know one of those big challenges that we have related to water in the springtime is our high tunnels bone dry from the previous year. past couple years we've had a little bit drier soils going into fall. So that's been a real challenge giving that high tunnel moistened or rehydrated. It's right now, you know, we have a lot of water in our soil. So it's good time to rehydrate that high tunnel takes a lot less water to do now than what we've seen in past past years.

C Christa Hartsook 07:48

Joe, how about those irrigation or fertigation systems themselves? Are there fall things that we need to do to make sure those are ready to roll right away in the spring?

J Joe Hannan 07:59

Yeah, Christa, I think I've probably harped multiple times on over the years on it in newsletters and podcasts on getting out cleaning up the irrigation system replacing parts anything that's wholly leaky, you don't want to bring in for next year. But one thing I haven't really been talking about much is going through and cleaning up our fertilizer injectors. I think a lot of people are pulling those injectors out pulling them apart, cleaning them up. But you know, we're getting to the point where some of these injectors in the state might be 4,5, 10 years old, they do have a limited lifespan on those internal components. So while you have it apart, take a look at those internal components, you may need to rebuild and recalibrate those injectors. And you can get a piston kit, you can get a seal kit, so the two kits complete rebuild of the internal structure for under \$100. So if your your injectors are starting to get several years old, you may look at rebuilding that internal components. You know, \$100 is a lot less than \$400 for

a new one. Absolutely. And those kits are readily available from all the suppliers that sell the injectors. So go back to whoever you bought your injector from. Maybe they should have the piston and seal kits.

C Christa Hartsook 09:17

Okay, Joe, the other part of your ongoing job I know is to really deal with food safety issues that we might have out there. Talk to me a little bit about you know, winter season for for food safety. I'm sure we have some classes and workshops coming up.

J Joe Hannan 09:34

Yep. So Christa, as you know, and I think a lot of people know I've taken the more active role helping farmers be compliant with the Food Safety Modernization Act Curtis safety rule on just general food safety, good handling practices on the farm. Right now we have our produce safety alliance classes scheduled throughout the state. Our next one is actually in Grinnell next week, but again, we have have a more than scheduled across the state throughout the winter. And these classes are designed to help you understand what that produce safety rule is and what you need to be doing on your farm to be compliant with that, that rule. So there are a really good foundational start to understanding that rule and understanding what you need to be doing on your farm. It really focuses on risk assessment, so on an understanding places where contamination on your produce could happen. So places where pathogens from livestock or compost or failure to washing hands and things like that covers all those different categories. And those are all over the state. But there are some other other pieces of this food safety modernization act as we start to come into that compliance timeline that I think are important to get information out. So one, I wanted to mention that starting in 2019, we'll start to see FDA inspections within the state. Okay, this is different than what we'll see in neighboring states, neighboring states, typically, it'll be the Department of Ag that will be doing the inspections. But Iowa has not gone that route. So it's actually FDA that will be doing the inspections, they're going to be focused on those larger farms that have to be fully complied with rule first. But they don't necessarily know who all those individuals are. So what they'll be doing is they'll be calling a lot of farms. And they'll be having simple conversations with them trying to determine where they fall within that coverage range of FSMA, whether their need to be fully compliant with the rule, whether they're completely exempt from a rule, or if they're in that middle ground. Okay. So if you get a call from FDA, I really strongly encourage you to call them back. Because if you don't call them back, they may show up unannounced, sure. Whereas if you call them back and have that conversation, and you're in that exempt or qualified exempt range, they may not even be coming out to your farm, that's not going to be their priority. So give them a call, have a chat with them. You be able to schedule it and time it out, within reason into your actual production harvest season. Time of day that works well for you day of the week that works well. So you're not trying to deal with the next FDA inspection while you're also trying to get on the road and go to market. So again, pick up that phone call, or pick up the phone and call them back if they call you.

C Christa Hartsook 12:38

Absolutely Joe I'm assuming kind of some of those compliance and coverage charts would be things that you guys would talk over in some of these classes you're gonna have.

J Joe Hannan 12:48

Yep. So we talked a little bit more details of what an FDA inspection actually looks like. We talked about the records that you have to have. And then all the the must do items under that law that you have to do. Okay, those are all covered in those produce safety Alliance classes. Yep. And those are heavily subsidized. Those are only \$20. Basically, the \$20 is to pay for your food while you're at those classes. Sure. So and this last year that will be subsidizing the cost.

C Christa Hartsook 13:19

Joe, let's say, you know, we have a listener out there who came to a class last year, is it worthwhile to come again,

J Joe Hannan 13:26

it's probably not worthwhile coming. Again, it's a standardized curriculum across the country. However, there is new information that we learn all the time as we get more clarity on this rule around the law. And so it does, it is a good idea to pick up the phone and have a chat with us talk about individual or changes that may have occurred, or how this rule may affect your individual farm. We also do on farm readiness reviews, okay, we actually come out to your farm. And we walk through from pre planning through post harvest, packing gene and delivering delivery. And we look at what you're doing versus what the law says you shouldn't be doing or must be doing. Okay, that's a one on one individualized private conversation that we can have. And those are free.

C Christa Hartsook 14:21

Okay. And something our producers out there can just pick up the phone and kind of schedule with the team.

J Joe Hannan 14:27

Yep. So there are four of us that are doing them. Right now. We're working on getting all eight or nine of us trained to go out and do those. But yeah, pick up the phone call myself, or you can email anybody on the team. We can get those scheduled and come out. Usually it's two or three of us that actually come out and have that conversation with you. And depending on you know, the size of your farm, some of them will that we have been on. It's been the farm owner and their employees and two or three of us from Iowa State walking through and having that conversation and it has been very productive.

C Christa Hartsook 15:02

That's great. It's a really nice service that's provided out there for our produce growers.

J Joe Hannan 15:06

Yeah, it's really there because FSMA allows a lot of flexibility within the rule for individual farms, to identify and assess their own risk knowing that every farm is different. And so a lot of that on farm Readiness Review is just having that discussion to make sure that farms are thinking about everything that they need to be thinking about, on their specific location.

C Christa Hartsook 15:32

That sounds good. Joe, is there anything else that we really need to think up or work on as we kind of wrap up our season and go into a winter?

J Joe Hannan 15:41

Be thinking about what you're doing next year if you're going to try any new crops, varieties, etc. definitely time to be getting out and getting soil samples right now and getting those interpreted? I think we'll be having something like an article in the acreage living newsletter here, coming up in a week or so that will cover more details on interpreting those soil reports.

C Christa Hartsook 16:04

All right. Well, thanks for being on as always, we sure appreciate it.

J Joe Hannan 16:08

Yeah, I'm always happy to be on Christa. Thanks for having me.

C Christa Hartsook 16:10

All right. Take care Joe.

J Joe Hannan 16:12

You too